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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/672,450	09/29/2000	Jonathan C. Kagle	03797.00006	1290

27195 7590 07/26/2005

AMIN & TUROCY, LLP
24TH FLOOR, NATIONAL CITY CENTER
1900 EAST NINTH STREET
CLEVELAND, OH 44114

EXAMINER	
MARIAM, DANIEL G	

ART UNIT	PAPER NUMBER
2625	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/672,450	KAGLE ET AL.	
	Examiner	Art Unit	
	DANIEL G. MARIAM	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4,5,7-11,13,14,16-20 and 23-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4,5,7-11,13,14,16-20 and 23-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 8, 2005 has been entered.

Response to Arguments

2. Applicant's arguments filed April 29, 2005 have been fully considered but they are not deemed to be persuasive for at least the following reasons.

Applicants argue, starting on page 8 of the remarks, that in Yajima, the separate data streams are combined prior to storage on a persistent storage medium. The Examiner disagrees. As best understood, applicants are saying that the difference between Yajima and the instant claimed invention is that Yajima combines/stitches the image segments prior to sending to the storage while in the claimed invention the stitching is done within the storage medium. What is the difference? It is the Examiner's position that stitching the data within the storage medium does not appear to distinguish from Yajima where the stitching is done prior to sending to the storage, and thus Yajima does meet applicants' claimed invention.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 10 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Peterson (6,411,742).

With regard to claim 19, Peterson discloses an image sensor the captures a digital image (See for example, scanner 20, in Fig. 1); a persistent storage medium (See for example, storage 16, in Fig. 1); a processor (computer system 10, in Fig. 1) that divides the captured image into a plurality of image segments, i.e., 18a-18d, performs image processing on each of the plurality of image segments (Figure 2a) stores the image segments on the persistent storage medium (item 16, in Fig. 1), and as respective image segments are stored stitches, i.e., stitches and/or blends (See for example, item 14, in Fig. 1), such segments together in connection with regenerating the captured digital image (See for example, Fig. 2b).

Claim 1 is rejected the same as claim 19 except claim 1 is a method claim. Thus, argument analogous to that presented above for claim 19 is equally applicable to claim 1.

Claim 1 0 is rejected the same as claim 1. Thus, argument analogous to that presented above for claim 1 is applicable to claim 10. Peterson further discloses a computer-readable medium having computer-executable instructions stored thereon for performing the steps recited in this claim (See Fig. 1).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-2, 4, 8-11, 13, 17-20, and 23 rejected under 35 U.S.C. 103(a) as being unpatentable over Yajima (5,809,176) in view of Peterson (6,411,742).

With regard to claim 19, Yajima discloses an apparatus (See for example, Figure 1A), comprising: an image sensor that captures a digital image (See col. 10, line 65 through col. 11, line 5); a (persistent) storage device; a processor, i.e., data distributor, that divides the captured image into a plurality of image segments, i.e., individual data streams (See col. 11, lines 18-20) performs image processing, i.e., encoding, on each of the plurality of image segments (See col. 11, line 21 and lines 30-34), stores image segments on the (persistent) storage medium, i.e., memory, and as respective image segments are stored stitches such segments together in connection with regenerating the captured digital image (See col. 11, lines 34-38).

Yajima does not expressly call for the memory as being a persistent storage medium. However, the use of a persistent storage medium, such as a hard disc or a floppy disc, is extremely well known as evidenced by Peterson (See for example, item 16, in Fig. 1). Therefore, it would have been obvious to one having ordinary skill in the art to incorporate the teaching as taught by Peterson into the system of Yajima, if for no other reason than to provide a persistent storage device, and to do so would at least enable the memory of Yajima to store the image data permanently.

Claim 1 is rejected the same as claim 19 except claim 1 is a method claim. Thus, argument similar to that presented above for claim 19 is equally applicable to claim 1.

With regard to claim 2, the method according to claim 1, wherein the performing act

comprises performing image processing on each of the plurality of image segments in pipeline stages (See for example, Figures 14 & 15).

With regard to claim 4, wherein the performing act is performed on a first image segment when the storing step is being performed on a second image segment (See for example, Fig. 15).

With regard to claim 8, the method according to claim 2, wherein one of the pipeline stages are divided into at least two parallel processing stages (See Figs.1A and 14).

With regard to claim 9, wherein the performing act comprises: performing at least a portion of the image processing in at least two parallel image-processing stages (See for example, Fig. 1A).

Claim 10 is rejected the same as claim 1. Thus, argument analogous to that presented above for claim 1 is applicable to claim 10. Yajima further discloses a computer-readable medium having computer-executable instructions stored thereon for performing the steps recited in the claim (See Figs. 1A and 1B).

Claim 1 1 is rejected the same as claims 2. Thus, argument analogous to that presented above for claim 2 is equally applicable to claim 11.

Claim 13 is rejected the same as claim 4. Thus, argument similar to that presented above for claim 4 is equally applicable to claim 13.

Claim 17 is rejected the same as claims 8. Thus, argument analogous to that presented above for claim 8 is equally applicable to claim 17.

Claim 18 is rejected the same as claims 9. Thus, argument analogous to that presented above for claim 9 is equally applicable to claim 18.

Claim 20 is rejected the same as claim 2 except claim 20 is an apparatus claim. Thus, argument similar to that presented above for claim 2 is equally applicable to claim 20.

Claim 23 is rejected the same as claim 9 except claim 23 is an apparatus claim. Thus, argument similar to that presented above for claim 9 is equally applicable to claim 23.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 5, 7, 14, 16 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yajima in view of Peterson as applied to claims 1-2, 4, 8-11, 13, 17-20, and 22-23 above, and further in view of Ise, et al. (5,140,647).

With regard to claim 5, Yajima (as modified by Peterson) discloses all of the claimed subject matter as already discussed above in paragraph 6, and the arguments are not repeated herein, but are incorporated by reference. Yajima (as modified by Peterson) does not expressly call for dividing the image into a plurality of image segments that overlap one another. However, Ise, et al. (col. 4, lines 47-48; and col. 13, lines 24-27) teaches this feature. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate the teaching as taught by Ise, et al. into the system of Yajima (as modified by Peterson), if for no other reason than to create image segments or portions that overlay one another, and thereby shortening the time taken for processing.

With regard to claim 7, the method according to claim 6, wherein the stitching step

comprises: stitching the plurality of image segments together sequentially following the performing step (See for example, Figs. 3 and 18 of Ise, et al).

Claims 14 and 16 are rejected the same as claims 5 and 7 respectively. Thus, arguments analogous to those presented above for claims 5 and 7 are respectively applicable to claims 14 and 16.

With regard to claim 24, the method according to claim 1, further comprising: storing image file information, wherein the image file information corresponds to the plurality of image segments for a stored image (See for example, item 9, in Fig. 1 of Ise, et al); and updating the image file information that has been affected by the step of performing image processing on any one of the plurality of image segments corresponding to the stored image (See for example, col. 4, lines 35-60 of Ise, et al).

With regard to claim 25, the method according to claim 24, further comprising: modifying, i.e., correcting, at least one of the stored plurality of image segments that has been affected by the step of performing image processing on any one of the plurality of image segments corresponding to the stored image (See for example, col. 4, lines 35-60 Ise, et al).

Claims 26 and 27 are rejected the same as claims 24 and 25 respectively. Thus, arguments analogous to those presented above for claims 24 and 25 are respectively applicable to claims 26 and 27.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G. MARIAM whose telephone number is 571-272-7394. The examiner can normally be reached on M-F (7:00-4:30) FIRST FRIDAY OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH M. MEHTA can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DANIEL MIRIAM
PRIMARY EXAMINER

July 25, 2005